
NASA
Bob Sieck
Former Launch Director
NASA

1
00:00:04,890 --> 00:00:21,810
BOB SIECK: I would imagine, you could say bittersweet. It'll be an emotional event to say the least.

2
00:00:21,810 --> 00:00:26,270
BOB CABANA: Discovery gets the job done. It's flown all kinds of missions and it's done them extremely well.

3
00:00:26,270 --> 00:00:32,410
It's a great flying machine and I think that's what it's remembered for.

4
00:00:32,410 --> 00:00:36,610
NARRATOR: With 38 missions completed successfully, space shuttle Discovery

5
00:00:36,610 --> 00:00:41,360
achieved a robust history of accomplishment for NASA's oldest active shuttle,

6
00:00:41,360 --> 00:00:51,290
including two Return to Flight missions, the launch of NASA's Hubble Space Telescope, and the deployment of

7
00:00:51,290 --> 00:00:58,810
Along the way, Discovery also contributed to scientific knowledge on Earth by hosting microgravity laboratories

8
00:00:58,810 --> 00:01:05,560
in space and carrying specialized instruments that analyzed Earth's atmosphere.

9
00:01:05,560 --> 00:01:09,830
JANICE VOSS: Discovery has a role to play. You can look back on the flights that it's

10
00:01:09,830 --> 00:01:15,480
done and on the contributions it made to forwarding the future of mankind.

11
00:01:15,480 --> 00:01:19,850
NARRATOR: In recent years, Discovery played an indispensible role in the

12
00:01:19,850 --> 00:01:25,770
construction of the International Space Station, the largest spacecraft ever assembled.

13
00:01:25,770 --> 00:01:28,120

STEPHANIE STILSON: Whenever I see Discovery launch I definitely feel like a proud

14
00:01:28,120 --> 00:01:30,910
parent, as do everyone that works with Discovery.

15
00:01:30,910 --> 00:01:37,260
BOB SIECK: It's the oldest orbiter in the fleet, it's flown more often than any of the other

16
00:01:37,260 --> 00:01:46,520
orbiters and it will take that record with it, until its, when it's put away in a museum.

17
00:01:46,520 --> 00:01:52,890
NARRATOR: Now headed into space for the last time, Discovery continues pointing a way toward accomplishr

18
00:01:52,890 --> 00:01:58,050
Its payload includes a module that astronauts and station residents will use for

19
00:01:58,050 --> 00:02:03,670
years to come on the space station as they continue its cutting-edge research.

20
00:02:03,670 --> 00:02:10,070
Crews will even be joined on the station by a robotic astronaut heading into space on

21
00:02:10,070 --> 00:02:14,850
Discovery: Robonaut 2, the first humanoid robot to venture into space.

22
00:02:14,850 --> 00:02:18,540
STEVE LINDSEY: It's a privilege I think, for us to be able to fly it on its last flight and it's a real tribute to

23
00:02:18,540 --> 00:02:23,990
the folks here and at the other manned spacecraft centers for all they've done to keep

24
00:02:23,990 --> 00:02:29,460
these vehicles flying and allowing them to do all the things they do.

25
00:02:29,460 --> 00:02:35,770
NARRATOR: Space shuttle Discovery blasted into orbit for the first time on Aug. 30, 1984.

26
00:02:35,770 --> 00:02:40,680
It made its mark on the future right away when the astronauts tested a solar array

27
00:02:40,680 --> 00:02:45,540
system that would later be used on the International Space Station.

28
00:02:45,540 --> 00:02:52,620
On its second flight, STS-51A, Discovery hosted a team of astronauts that used a

29
00:02:52,620 --> 00:02:58,120
futuristic jetpack to snare a stranded satellite and return it to Earth.

30
00:02:58,120 --> 00:03:01,370
BILL HARWOOD: It was an amazing sight to watch Joe Allen with the manned

31
00:03:01,370 --> 00:03:04,580
maneuvering unit flying free of the shuttle, no tethers,

32
00:03:04,580 --> 00:03:10,590
over to a satellite, which was very close by, and attach his grapple fixture and fly it back to the shuttle.

33
00:03:10,590 --> 00:03:14,540
That was an amazing thing to see.

34
00:03:14,540 --> 00:03:17,790
NARRATOR: Discovery went into space six times during its first year,

35
00:03:17,790 --> 00:03:22,540
but would make perhaps its greatest impact on NASA after the Challenger accident

36
00:03:22,540 --> 00:03:25,970
grounded the shuttle fleet for more than two years.

37
00:03:25,970 --> 00:03:30,260
When NASA was ready to send its astronauts back into space again,

38
00:03:30,260 --> 00:03:36,600

it was Discovery that rolled to the launch pad to carry out the mission, STS-26.

39
00:03:36,600 --> 00:03:47,720
BOB SEICK: STS-26 was a great event for the team. Describe how it felt, iIt felt like STS-1 all over again.

40
00:03:47,720 --> 00:03:51,250
NARRATOR: Discovery rarely was overshadowed during its career.

41
00:03:51,250 --> 00:03:57,410
That changed in April 1990, when the shuttle launched NASA's Hubble Space Telescope,

42
00:03:57,410 --> 00:04:06,090
deploying it on a mission that would alter the way we see our universe and our understanding of our place in it.

43
00:04:06,090 --> 00:04:12,300
BOB SIECK: But when Hubble came along, it was, wow, this is a different payload.

44
00:04:12,300 --> 00:04:17,720
NARRATOR: Discovery would see the Hubble telescope two more times, in February 1997,

45
00:04:17,720 --> 00:04:26,530
and December 1999, on servicing missions that saw astronauts upgrade the telescope's instruments and syste

46
00:04:26,530 --> 00:04:31,710
Discovery also allowed unique views of some of Earth's closest neighbors.

47
00:04:31,710 --> 00:04:38,080
Astronaut Bob Cabana flew into space for the first time aboard Discovery in October 1990,

48
00:04:38,080 --> 00:04:45,140
on a mission to launch the Ulysses probe on the first mission to look at the sun's north and south poles.

49
00:04:45,140 --> 00:04:55,000
BOB CABANA: My first flight, you know, it's pretty amazing to be standing at the 195-foot level looking at this n

50
00:04:55,000 --> 00:05:01,510
it's venting, it's creaking, it's ready to go into space. It says "Discovery" on the side, you know and you just can

51
00:05:01,510 --> 00:05:12,900
that three hours from now you?re going to be inside there blasting off. You know, it's just, it's amazing, it really

52
00:05:12,900 --> 00:05:20,520
JANICE VOSS: Discovery was my only night launch. And standing on there with all the flood lights on Discover

53
00:05:20,520 --> 00:05:28,480
You can hear all the cryogenics. It's very quiet at night. You hear everything creaking and groaning. It's just the

54
00:05:28,480 --> 00:05:31,700
That's what I really remember about Discovery from a visual perspective is seeing it

55
00:05:31,700 --> 00:05:35,980
just bathed in all those really bright lights at night on the pad.

56
00:05:35,980 --> 00:05:42,200
NARRATOR: Along with its important payload, Discovery played its part in international relations, as well.

57
00:05:42,200 --> 00:05:52,520
Cosmonaut Sergei Krikalev became the first Russian to fly on a shuttle during Discovery's STS-60 flight in Feb

58
00:05:52,520 --> 00:05:59,490
Astronaut and former senator John Glenn returned to orbit aboard Discovery in October 1998,

59
00:05:59,490 --> 00:06:08,440
after he made history as the first American to orbit Earth on Feb. 20, 1962.

60
00:06:08,440 --> 00:06:16,170
Just as Discovery changed the people who flew aboard it, the spacecraft itself underwent numerous advances

61
00:06:16,170 --> 00:06:23,740
For example, technicians installed a "glass cockpit" in 2001 that replaced analog dials

62
00:06:23,740 --> 00:06:28,990
and instruments with modern, digital displays.

63
00:06:28,990 --> 00:06:34,210

The spacecraft was also lightened as test instruments for its first flights were removed

64
00:06:34,210 --> 00:06:39,220
and modifications to other systems shaved off more weight.

65
00:06:39,220 --> 00:06:49,810
Discovery and all the NASA shuttles would undergo one more metamorphosis after the Columbia accident in F

66
00:06:49,810 --> 00:06:54,910
STEPHANIE STILSON: My proudest moment with Discovery would have to be Return to Flight after the Colum

67
00:06:54,910 --> 00:06:59,710
We basically found the problem, fixed the problem and proved to the world that we could continue flying.

68
00:06:59,710 --> 00:07:04,700
NARRATOR: Just as it had done 17 years before, Discovery took to space to prove NASA's

69
00:07:04,700 --> 00:07:09,850
shuttle fleet was not finished marking its place in exploration history.

70
00:07:09,850 --> 00:07:18,590
MIKE LEINBACH: The overwhelming sense of the launch team was that, 'This is what we do. We have to. We

71
00:07:18,590 --> 00:07:24,250
NARRATOR: Along with sister shuttles Atlantis and Endeavour, Discovery finished assembling the

72
00:07:24,250 --> 00:07:31,700
International Space Station and then helped take new parts, supplies and experiments to the orbiting laborator

73
00:07:31,700 --> 00:07:36,270
STEVE LINDSEY: I was telling some employees here yesterday, when you walk inside Discovery and see it,

74
00:07:36,270 --> 00:07:40,660
it still looks like a new car after almost 30 years of service.

75
00:07:40,660 --> 00:07:46,290
NARRATOR: Discovery is expected to be put on public display after the space shuttle retires.

76
00:07:46,290 --> 00:07:54,700
BOB SIECK: Everyone here that has ever done anything associated with an orbiter will be, will say, 'I worked o

77
00:07:54,700 --> 00:08:03,130
BOB CABANA: I think Discovery's, just because it has flown so much, it has been such a work horse, it flew re

78
00:08:03,130 --> 00:08:10,180
I think if you go back and look at all the missions its flown, it really has achieved some phenomenal successes.